Abstract of the disclosure

Nano-hybrid Concrete Chemical Admixture for chloride invasion resistance consisting of Layered Double Hydroxide/Polyurethane copolymer

The present invention relates to a chloride penetration resistant nano-hybrid concrete chemical admixture comprising layered double hydroxide and polyurethane copolymer. More specifically, nano-hybrid concrete chemical admixture obtained by combining the two compounds at a nano-scale, the layered double hydroxide which exhibits resistance to chloride penetration, and polyurethane copolymer which entails an excellent water reducing ability, durability and workability. In addition, the inorganic/organic hybrid material described herein exhibits high water reducing ability, improved resistance to chloride penetration, and thus can be used as chloride penetration resistant concrete chemical admixture for marine concretes.

Figure 1